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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/680,614

10/06/2003

Tiao-Ho Yuan

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04/17/2006

PRO-TECHTOR INTERNATIONAL
20775 Norada Court
Saratoga, CA 95070-3018

EXAMINER

CHORBAJI, MONZER R

ART UNIT

PAPER NUMBER

1744

DATE MAILED: 04/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/680,614

Applicant(s)

YUAN, TIAO-HO

Examiner

MONZER R. CHORBAJI

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This general action is in response to the application filing date of 10/06/2003

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "incisions" recited in claim 2 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

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2. The disclosure is objected to because of the following informalities: on page 5, numbered line 21, the specification recites the phrase "cap 14a", yet the drawings do not reflect this structure. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1-3, 5, 7-8 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehoux et al (U.S.P.N. 6,814,929) in view of Soller (U.S.P.N. 6,482,365).

With respect to claim 1, the Lehoux reference discloses a wick with a bottle that is capable of holding essence (figure 1:2 and 8) that include the following: a base (figure 4:34) having a chamber (unlabeled space within the base 34 in figure 4) an a lower end (unlabeled lower end of 34 in figure 4) with a periphery from which projecting points protrude (unlabeled step-like structures in base 34 of figure 4 such that depending on

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the size of each step structure, the bottom surface of such a step constitutes projecting points that is capable of creating a gap between the base and the bottle opening), a heat resistant element (figure 2:6) having a lower side with an opening (figure 2:6c) and an upper side (figure 2:18) with at least one hole that reaches the opening, an oil feeder (figure 1:8) having an elongated shape with an upper end that is capable of reaching into the opening of the heat resistant element (figure 2:6), a lower end that is immersed in oil (figure 1:8), a catalyst (col.4, lines 27-32) and a separating annular groove (figure 2:22) between the catalyst and the heat resistant element positioned on upper side of the heat resistant element. The Lehoux reference recognizes that the catalyst should be separated from the wick (col.4, lines 42-44), but fails to teach a separating means such as a grid. The Soller reference teaches placing a grid (figure 3:54) between the catalyst (figure 3:56) and the flame of the wick (figure 2:42). Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to substitute the separating groove of the Lehoux device with the separating grid of the Soller reference since the separating grid contains ventilation openings for allowing air exit and pass through the catalyst (Soller reference, col.5, lines 5-10) for an increased vaporization rate.

With respect to claims 3, 5 and 12, the Lehoux reference teaches the following: the base has a fixing element (figure 4:32), the fixing element is a fixing plate (the unlabeled bottom portion of element 32 constitutes the plate in figure 4) and the catalyst (col.4, lines 27-29) has a hole since it sits around the heat-resistant element (figure 2:6 and 14).

With respect to claim 2, the Lehoux reference fails to teach that the base has plurality of incisions; however, the Soller reference discloses a base with incisions (figure 1:12 and 26). So, it would have been obvious to one having ordinary skill in the art at the time the invention was made to create incisions in the base of the Lehoux device as taught by the Soller reference so that air can pass into the base and up into the axial cavity of the heat-resistant element (Soller reference, col.3, lines 48-51) resulting in an increased rate of vaporization.

With respect to claims 7-8 and 10-11, the Lehoux reference recognizes that the catalyst should be separated from the wick (col.4, lines 42-44), but fails to teach a separating means such as a grid. The Soller reference teaches placing a grid (figure 3:54) between the catalyst (figure 3:56) and the flame of the wick (figure 2:42). The grid is made of metal and includes multiple openings (figure 3:70 and col.4, lines 30-33). In addition, the grid of the Soller reference has an inner opening (unlabeled space within the annular skirt 60 in figure 3) with an inner peripheral grid (figure 3:60) and an outer peripheral grid (unlabeled outer peripheral surface of 54 in figure 3). Depending on the sizing of both the heat-resistant element of the Lehoux reference (figure 2:6) and the separating grid of the Soller reference (figure 3:54), the heat-resistant element is capable of extending into the inner opening of the separating grid of the Soller reference. Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to substitute the separating groove of the Lehoux device with the separating grid of the Soller reference since the separating grid contains

ventilation openings for allowing air exit and pass through the catalyst (Soller reference, col.5, lines 5-10) for an increased vaporization rate.

6. Claims 4, 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehoux et al (U.S.P.N. 6,814,929) in view of Soller (U.S.P.N. 6,482,365) as applied to claims 3, 1 and 12 and further in view of Searle (U.S.P.N. 692,075).

With respect to claims 4, 9 and 13 both the Lehoux reference and the Soller reference fail to teach the use of a metal mesh; however, the Searle reference teaches the use of metal mesh (figure 1:A and page 1, left column, lines 42-53) with plurality of openings such that the metal mesh is capable of being inserted between the heat-resistant element of the Lehoux reference (figure 2:6) and the separating grid of the Soller reference (figure 3:54). As a result, it would have been obvious to one having ordinary skill in the art at the time invention was made to insert a metal mesh between the catalyst and the heat-resistant element of the Lehoux reference so that the catalyst is consumed slowly resulting in generating fumes unaccompanied by obnoxious smoke (Searle reference, page 1, right column, lines 74-54).

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lehoux et al (U.S.P.N. 6,814,929) in view of Soller (U.S.P.N. 6,482,365) as applied to claim 1 and further in view of Ferguson (U.S.P.N. 6,555,069).

With respect to claim 6, both the Lehoux reference and the Soller reference fail to teach constructing the heat-resistant element of ceramic materials; however, the Ferguson reference teaches that the heat-resistant element is made up of ceramic material (figure 2:30). Therefore, it would have been obvious to one having ordinary skill

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in the art at the time invention was made to modify the construction material of the heat-resistant element of the Lehoux reference to ceramic material as taught by the Ferguson reference so that the rate of vaporization is increased since ceramic material absorbs liquids (Ferguson reference, col.3, lines 40-46).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Bonnema et al (U.S.P.N. 5,928,605) reference and the Leonard et al (U.S.P.N. 6,503,459) reference both teach the use of a wick in combination with a catalyst.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONZER R. CHORBAJI whose telephone number is (571) 272-1271. The examiner can normally be reached on M-F 9:00-5:30.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, GLADYS J. CORCORAN can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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04/13/2006

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